

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.mpto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,650	02/14/2002	Kaoru Matsuki	KIN-12976	9373
7609	7590 06/12/2003			
RANKIN, HILL, PORTER & CLARK, LLP 700 HUNTINGTON BUILDING 925 EUCLID AVENUE, SUITE 700			EXAMINER	
			MILLER, ROSE MARY	
CLEVELAN	D, OH 44115-1405		ART UNIT	PAPER NUMBER
			2856	
			DATE MAILED: 06/12/2003	•

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	A multi-control				
•	Application No.	Applicant(s)				
Office Action Summany	10/075,650	MATSUKI ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication ann	Rose M Miller	2856				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tired within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed vs will be considered timely. I the mailing date of this communication. ED (35 U.S.C. § 133)				
Status1) Responsive to communication(s) filed on <u>14 F</u>	ehruary 2002					
,= .	is action is non-final.					
3) Since this application is in condition for allowa		rosecution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>4,5 and 8-11</u> is/are allowed.						
6)⊠ Claim(s) <u>1,2,6 and 7</u> is/are rejected.						
7)⊠ Claim(s) <u>3</u> is/are objected to.	7)⊠ Claim(s) <u>3</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	•					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on 14 February 2002 is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) Other:						
U.S. Potent and Trademork Office						

Application/Control Number: 10/075,650 Page 2

Art Unit: 2856

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 7 are rejected as being indefinite as the phrase "the secondary coil", found on lines 2 and 3 of claim 6 and on line 2 of claim 7, lacks a proper antecedent basis as claims 4 and 5, from which claims 6 and 7 depend, recite a "first secondary coil" and a "second secondary coil". A suggestion for correction would to utilize either the phrases "the first secondary coil" and "the second secondary coil" or the phrases "the first primary and secondary coils" and "the second primary and secondary coils" (the second set of phrases are found in claim 11).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Page 3

Application/Control Number: 10/075,650

Art Unit: 2856

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kluft (US 5,663,504)**.

Kluft discloses a vibration detecting system comprising a detector (5) for detecting the vibration of the body under test and outputting a detection signal in accordance with the vibration; and a magnetic circuit (6, 7) having a primary coil (6) and a secondary coil (7), the primary coil and the secondary coil being in close electromagnetic connection (see column 4 lines 20-33), wherein the vibration of the body under test is detected using an output signal generated in the secondary coil when the detection signal from the detector is received by the primary coil (see column 4 lines 20-33).

Kluft discloses the claimed invention with the exception of the body under test being a resilient body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Kluft to test a resilient body as the system of Kluft will work in any environment where contactless transmission of a received vibration is required or would reduce the amount of errors produced in a system while increasing the life span of the testing apparatus.

As for claim 2, **Kluft** clearly discloses the detector comprising a piezoelectric element (5).

Allowable Subject Matter

- 7. Claims 4-5 and 8-11 are allowed.
- 8. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/075,650 Page 4

Art Unit: 2856

9. Claims 6 and 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach and/or suggest a vibration detecting system of a resilient body comprising a detector, a magnetic circuit having a primary coil and a secondary coil, wherein the vibration of the resilient body is detected using an output signal generated in the secondary coil when the detection signal from the detector is received by the primary coil, and especially wherein the detector is located around the resilient body and is constructed of a non-contact detecting element for detecting the vibration of the resilient body in a non-contact manner.

The prior art of record fails to teach and/or suggest a vibrating contact detection probe comprising, in combination with the other recited elements, a vibration energy transmitter having a first primary magnetic circuit having a first primary coil connected to a vibration energy source and a first secondary magnetic circuit having a first secondary coil connected to the vibrator; the detection signal transmitter including a secondary primary magnetic circuit having a second primary coil connected to the detector and a second secondary magnetic circuit having a second secondary coil for fetching the detection signal, with the stylus, the vibrator, the detector, the first secondary magnetic circuit and the second primary magnetic circuit being integrated on the stylus structure, the first primary magnetic circuit and the second secondary magnetic circuit being integrated on the stylus support.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bansevichus et al. (US 4,397,188) discloses a piezoelectric resonant contact sensor.

Art Unit: 2856

Hidaka et al. (US 6,457,366 B1) discloses a movement control mechanism of a contact-type vibrating probe.

Matsuki et al. (US 6,516,669 B2) discloses a vibration-type contact detection sensor.

Okamoto et al. (JP 2002156219 A) discloses a vibration-type contact sensing probe which uses magnetic-circuits.

Hidaka et al. (JP 2002243538 A) discloses the use of a magnetic circuit to non-contactly send a signal representative of the detected vibration of the stylus. This is the Japanese patent which issued from Applicant's priority document.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rose M Miller whose telephone number is 703-305-

4923. The examiner can normally be reached on Monday - Friday, 7:30 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 703-305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

RMM

June 7, 2003

HEZRON WILLIAMS

i. well

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800